

1560/921.

AN  
**ACCOUNT**  
OF THE  
**IMPROVEMENT**  
OF  
**M O S S, &c.**

*IN A LETTER TO A FRIEND.*

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FOURTH EDITION CORRECTED.

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ACCOUNT

THEATRE

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DEAR SIR,

ACCORDING to promise I send you an Account of the improvement of MOSS, as practised by Mr John Smith of Swindrig-muir, and his Tenants, he being the first person who attempted it in this manner in Scotland, upon his Estate four miles west from Beith, upon the Road from Beith to Irvine, in the Shire of Ayr.

MOSSES are of different sorts, but may be reduced to the two following.

I. Black or Peat Moss, and

II. White or flow-moss called in Ireland, Red Moss.

THE first seems to be composed of the roots and fibres of Heather or Heath, and other larger vegetables, is more solid and tenacious than the white-moss, and in consequence, more improveable, and is what is used as Peat for Fewel.

The second seems composed of a white fog, capable of retaining a great proportion of water, is almost Fluid, and when drained is of a spongy light substance like a bed of Tow. In Mosses of this sort, there is a stratum from three to twenty-four inches thick, of this light fuzzy substance, above the black Peat, and when it is dug for Fewel, this is all laid aside, being incapable of making Peat for burning. This sort of Moss is not so fit for improvement as the first,

A

especially when the Stratum of this light spongy matter is very thick, requiring a longer time to consolidate, before the lime, or other manure can operate upon it, and the first Crops are not so certain, tho' in two years it becomes nearly as good as the other, and is improved to advantage. The Mosses here are from eight to fourteen feet deep, some more, and the success in reclaiming them has been equal, whatever depth they have been.

The first thing to be done, is to mark off, and cut out, proper main or master Drains, in order to carry off, the superfluous water, taking care to preserve the greatest possible Level, which in every case that has yet occurred, has been easily obtained, and which drains, can be, and are so constructed, as to divide the field into inclosures from six to ten Scotch Acres. If the Moss hangs, or declines, the inclosures may be of any dimension whatever.

The dimensions of these drains when first made are eight feet wide, by four and a half feet deep, declining to two and a half feet at bottom, and cost at the rate of one Shilling per fall of eighteen and a half feet, running measure. The Ridges are then to be marked off regularly, six or seven yards broad, formed with the spade in manner following.

In the centre of each Ridge, a space of about twenty inches is allowed to remain untouched, on each side of which a furrow is opened, and turned upon the untouched space, so as completely to cover it (like what is called the seering of a gathered Ridge). Thus begun the work is continued, by cutting with the Spade, in width about twelve inches, and turning it over, to appearance as if done with a Plough, until you come to the division-furrow, which should be two feet wide, cut out and thrown upon the sides of the Ridges.

The depth of the division-furrow is to be regulated by circumstances, according as the Moss is wet or dry, but so

as to answer the purpose of as it were bleeding the Moss, and conducting the water to the main Drains.

It may be here observed, that the success of the after-crops depends very much upon a proper formation of the Ridges. They must not be made too high in the middle, for there they will be too dry like a peat, upon which the Lime cannot act, and near the furrows they will be too wet, which is equally prejudicial; they should therefore be constructed with a gentle declivity to the furrows, so as the rain which falls may rather filtrate through the Ridge to the furrows than run quickly off the surface.

The operation of digging and forming the Ridges has generally been done by contract, and where the surface is tolerably even or equal, it costs one pound thirteen shillings and four pence, per Scotch acre, or twopence halfpenny per fall; but where it is in great holes, and wheel-barrows used, it costs from two pounds to two pounds two shillings per acre. At these rates an ordinary Workman will earn one shilling and sixpence, and an able and experienced Workman from two shillings to two shillings and sixpence, per day.

The next operation is to top-dress the Ridges with Lime, at the rate of, from four to eight Chalders per acre. Five Winchester Bushels make a Boll, and eight Bolles a Chalder, of shell Lime, producing sixteen Bolles powdered Lime, being the ordinary measure of Lime in this district, (Irish Lime excepted, which is only four Winchester Bushels); the quicker the Lime is put on after being slackened the better. Coal and Lime abound in the neighbourhood, and the prime cost of Lime at the Kilns is one shilling and two pence per Boll, Shells, of five Winchester Bushels.

This Moss is of a considerable extent, and a narrow superficial road has been made through the middle of it, so as to admit single-horse carts. A small Trench or Drain is cut

on both sides of the Road, and the Road covered with stone, gravel, or any hard substance, and seems to stand well. By this Road the Lime and Dung is carried in single-horse Carts, and put upon the Ridges by Wheel-barrows, upon Plank ; the expence of which I could not learn, not being contracted for, but done by the Farm Servants, but was told it was more trifling than I could suppose. The second year after the main Drains have been made, the sides consolidate so as to carry single-horse Carts in Summer, and the Lime and Dung is carried by them to the Road, and the Crops taken off in the same manner.

The proper season to prepare the Moss for a first Crop, is early the preceeding Summer ; in that case the Lime aided by the heat, the after rains, and the Winter frosts, makes considerable progress in the process of putrefaction, consequently forms a mould to receive the Seed.

Oats are some times sown as a first Crop, but they very often misgive the first year, and from what I saw, and was informed, never ought to be done where Dung can at any expence be procured. Potatoes planted in what is called the Lazy-bed-way, ought to be the first Crop. The method is simple and attended with little expence. The Moss prepared by Ridges, and Limed as before described, the Potatoe-beds next spring are marked off, a-cross the Ridges, five or six feet broad, with intermediate spaces of about two feet, as furrows or trenches. The beds are covered over with a thin stratum of Dung, about eighteen single-horse Carts to an acre, the cuttings of the Potatoes are laid or placed upon the beds, about ten or twelve inches asunder, and the whole covered over with a thin stratum of Moss, from the intermediate trenches, which is followed by an other covering from the trenches, when the Potatoe plants make their first appearance, the covering in whole four or five inches. In this state they remain without any hoeing till the Crop is

taken up. The produce never less than from forty to fifty Bushels of excellent potatoes, eight Winchester Bushels to the Bushel, and the Bushel a little heaped.

When the Potatoe Crop is removed, the Ridges are again formed as before described, and the division-furrow cleared out, which costs at the rate of eighteen shillings per acre.

In performing this part of the work, it will naturally occur, that a great part of the manured surface will be buried in filling up the trenches between the Lazy-beds; but that is not the case: The Workman makes two cuts with the spade, at eighteen inches distance, upon the side of the trench; another, one foot from the edge of it, as deep as the trench; which, instead of turning over he presses a foot forward into the trench, which is continued the length of it, and when he comes to the other side, he does the same, making both meet, and so proceeds, so that no part of the manured surface is thrown down, and the ridge left in the same form, as before the Lazy-beds were made.

It may be here remarked, that every operation done upon Moss by the spade, can be executed at the third of the expence, that would be requisite, on any the easiest wrought dry land. Moss is a light substance, sufficiently tenacious, never sticks to the Spade, and requires no force to cut it, as it works as easy as a new made Cheese would. Any person who has seen Mosses dug for Peats as fewel, will be convinced how quick, and with what facility it is done, even by Labourers not accustomed to it.

When the Potatoe Crop is taken off, and the Ridges formed as before described, they remain in that state till Spring, when Oats are sown, (a wet or dry Season has from experience been found a matter of indifference), and harrowed in

with a small harrow drawn by two men. Four men with ease harrow at least one acre one rood per day, two and two by turns with the harrow, and the other two in the interim with spades, smoothing the inequalities, breaking and dividing the mould, and clearing out the division-furrows; which last in all operations upon Moss is essentially necessary. The early or hot-seed Oats are always preferred for Seed. The late or cold-seed runs too much to straw, falls down, and becomes gloomy, consequently the Grain is of mean quality, and unproductive in Meal.

The produce of the first Crop of Oats after Potatoes, is seldom less than ten Bolls per acre, the Linlithgow Boll of six Winchester Bushels, and considerably more has been known; as good Grain in quality, and Meals as well as any in the Country. It has been sold when growing, what is called upon the foot, including the straw, from eight to ten pounds per acre. To prepare for a second Crop of Oats, the Ridges must be dug a-cross, and turned over in the manner before described and the division-furrows cleared out as soon as convenient after the first Crop is removed; which costs at the rate from one pound to one pound six shillings per acre, and the produce of the same as the first Crop; and for the third Crop it is sometimes ploughed; but suppose it dug over, the seed sown in the Spring, and harrowed as before mentioned, at the same expence for digging and harrowing.

Such is the effect of Lime, in consolidating Moss, aided by the draining, that often after the second, and always after the third year, it can be ploughed by Horses within two Bouts or Stitches of the division-furrow; even the white or flow-moss, and also harrowed by horses, and the Crops taken off by Carts.

Five and often six consecutive Crops of Oats are taken,

without any other manure than what it received the first year for Potatoes, without any apparent signs of it being exhausted. The produce of the first two Crops of Oats has been mentioned to be ten Bolls, and the third, fourth, fifth, and sixth, produce from six to ten Bolls per acre. The Moss is now turned into a seeming rich dark-brown mould, and what renders it less productive of Corn Crops, the fourth, fifth, and sixth years, is, by its naturally running into sweet and luxuriant grasses. The soft meadow-grass, the daizie, some plantain, but principally the white Clover, are the most prevalent grasses; or more probably it may be ascribed to these Crops being Ploughed, in place of being dug with the spade, as the former years were. Along with the fifth or sixth Crop of Oats, Rye-grass is sown, which, with the natural grasses in general, produce an abundant Crop of Hay. I saw it when cut this year one thousand seven hundred and ninety-six, not inferior to any Hay-crop upon the best lands, and it afterwards affords excellent pasture grass, which I think would let at one pound five shillings per acre.

It has been before mentioned, that Oats are often taken as a first Crop, and that they often fail the first year. The produce of the second and subsequent years when not after Potatoes is from six to ten Bolls per acre. The planting Potatoes at first, is considered the most certain Crop, and the best and most speedy method to reduce the Moss into mould or soil, not so much perhaps owing to the dung in aiding the putrid fermentation already begun in the Moss by means of the Lime, as to the assistance afforded by the Potatoe-crop in overshadowing the ground, and causing a stagnation of air, thereby preventing the exhalation of moisture, and consequently greatly accelerating the putrefaction or decomposition of Moss, or possibly it may be ascribed to taking up the Potatoes when the surface is minutely broken and separated, and the manure thereby intimately mixed with the soil.

The practice is now generally followed by the Farmers, in as far as they can procure dung, and that with never failing great success.

The white or flow-moss has been formerly mentioned, a considerable quantity of this sort has also been reclaimed here in the manner before described; so wet and spongy in its natural state, as not to be capable of bearing a Dog, and two feet thick of this spongy fungous stuff, upon the top of the Black or Peat Moss. The only seeming difference is, the first Crop is not so good, and it requires longer time to consolidate, and the main-drains and division-furrows sooner fill up, and require to be oftener deepened and cleared out, occasioning a small additional expence, and a little delay in time.

If the Moss in the original state has been wet and spongy, it will be found to have subsided some feet after the third or fourth year's operation have been performed, care must always be taken to deepen, clear out, and keep clear the main-drains and the division-furrows, to prevent a super-abundance of moisture which would infallibly be the case, were they neglected in consequence of the subsidence of the Moss. Indeed Moss of all sorts will subside less or more, in proportion as it has been wet or dry in its original state, at the same time, as stated before, care must be taken not to lay it too dry, but to keep in a proper degree of temperature between these two extremes.

Mr Smith who is very intelligent in the improvement of Moss, was so obliging as to show me a considerable quantity of land, under this culture, belonging to himself and other proprietors, and to give me a full account of it, and nobody could be more anxious to have me truly and well informed. From him and some of the Tenants, with my own observations upon the spot, this account has been made up.

He has practised it twelve years, the first four or five of which, he was little followed, but now his own Tenants, and many in the neighbourhood, and others at a considerable distance, who are possessed of Moss, have been, and are now following the example, to a very considerable extent. I spent several days there in July and August one thousand seven hundred and ninety six, and was over above a hundred and fifty acres, belonging to different people, in the various stages of improvement, and all the Crops were abundant and looking well, except some Oats of the first year; where the Moss had not a previous Crop of Potatoes, and the whole appeared to me to answer fully the accounts formerly detailed. The Potatoes in particular were more luxuriant, and more generally good, without a blank, than I had ever before seen upon any ground.

He has tried various methods and manures, and from a strict attention to the results, the method before mentioned has been by far the most successful, never having failed in one instance, either upon Black, or Flow Moss, and the Crops, from good or bad seasons, not near so precarious as upon common cultivated ground: is of opinion that Lime, or any calcareous matter, such as the different kinds of Marl, &c. is a most certain and permanent manure to reclaim Moss: That dung without Lime is found incapable to reclaim Moss: That dung even with Lime, when applied otherwise than with a Potatoe-crop, does not answer near so well. This possibly may be accounted for, by the Potatoes overshadowing the ground, and promoting the decomposition of the Moss, or by the operation of taking them up, as formerly observed. Mr Smith, in the notes he furnished me, was not so presumptuous as to say, that the system before described is the very best possible method, and far less that the system of Croping is the best, on the contrary he thinks the last may be much improved, and is to try it; all that is here meant, is to describe the methods that have been

tried, and candidly to give an account of the results.

What made this improvement appear the more extraordinary to me, was, that this district of the county, is let in very small Farms, a considerable part of it is very good land, under the most execrable management. No Turnips, no Fallow, no Clover, little or no Pease, or other green Crops, a few Potatoes excepted, and a very little Barley. What is considered here as the greatest improvement is, to lay on Lime (of which they have every where abundance, though not very cheap at the Kilns), upon grass lands, in Autumn, and plough it up in Winter and Spring, taking Oats after Oats successively, as long as it will bear any, and then leave it to grass itself, or in a few instances, to sow a little Rye-grass with the last Crop, and when it has lain four or five years in grass, the ground undergoes the same mismanagement. Yet the same people, in the improvement of Moss, follow the practice before described, with the utmost care and accuracy, and every thing is conducted in the most workman-like manner: which I can ascribe to nothing, but that the principal operations, such as draining, digging, and forming the Ridges, 2nd division-furrows, &c. are done by contract; and the Tenants have only to see it completely executed. They had a good model before their eyes, and know that any essential error, or small saving, might endanger their future success, and therefore keep as close to it as possible.

In one of my excursions, I met a Farmer who had improved a considerable quantity; and amongst other questions, asked him how soon he expected to be repaid his expences of improvement? His answer was, he did not exactly know, but I might judge from this circumstance, that he had this year improved five acres upon the remainder of an old Lease, of which there was only four years to run, without hopes of getting a renewal; and next year, he intended to improve five

more, when he would only have three years of his Lease. That in his Farm he possessed dry land for which he paid one pound per acre, and he considered the improved Moss infinitely more valuable than this dry land, for bearing crops of Corn. This is a more convincing proof of the quick returns, than any thing I could otherwise obtain.

I rode over some fields which had been in grass for four or five years. They appeared from the conterminous unclaimed Moss, to have subsided about three or four feet; the crowns of the Ridges from their greater weight and pressure, had sunk so as to be equal with the old furrows; forming to appearance a dead level; the grass good; principally of the kinds before mentioned, and a great stock of Cattle feeding upon it, which had not in the least poached it, or broke the sward even in the old furrows: And I rode over the whole of it, without the least danger of sinking; although there was not less than eight feet thick of Moss, under the improved surface. Some sprotts or rushes were beginning to appear in the old furrows, but not one upon the Ridges. Adjacent to this, was another piece of the same age, which had been manured the year before, at the rate of about half the quantity of Lime, original given, and ploughed by horses, and sown with Barley, which was a great crop, equal to any I saw in the Country, and as forwardly, would be fit to cut the first week of September. Taking five or six consecutive crops of Oats, appears most absurd management, but it will be remembered that this district is possessed by Tenants of small Farms, and of limited capitals, who think they cannot be too soon, or too greatly repaid for what they have laid out in improvement, and that this is the common practice even on their best lands. If I may be allowed to hazard an opinion, in a point where have I no experience, I should think it necessary to crop the Moss, till it is so consolidated as to bear Cattle, which it will always do, after the third Crop: And with that Crop

to sow natural-grass seeds from meadows in England, with Rye-grass, and if these cannot be obtained, with Clovers particularly white, with rib-grass, and a greater proportion of Rye-grass than is usual. The white Clover and Rib-grass is what spontaneously is produced without being sown, and therefore seems congenial to this sort of soil, and the Rye-grass, the root of which is a creeper, has the effect to bind and unite the surface, which is naturally open, and prevent the other grasses when tender and young, from being thrown out by the sudden frosts and thaws in Winter, and from experience thrives wonderfully, being the only artificial grass yet attempted here.

I am afraid it would be dangerous to put to grass, sooner than with the third Crop, for the Cattle would poach the surface, and break the skin of the turf, and in that case, Rushes would certainly immediately grow, which in this Climate, once they come into a field, cannot easily be destroyed. But indeed in this sort of improvement, it does not seem so necessary to put the ground so quickly into grass after manuring, as in dry grounds. The Crops appear to fail very little in produce, a sure sign the soil is little exhausted, and the corn crops afford a great quantity of straw for dung, so essentially necessary for a first Crop of Potatoes, and the subsequent improvement of more Moss. At the same time, I have no doubt, that the pasture would be infinitely more valuable, if it were sooner put to grass, after being manured.

It will occur, that Sheep being a much lighter animal, and thereby not liable to poach the ground or break the surface, may be put on reclaimed Moss, long before it is so consolidated as to bear Cattle; but I am afraid, it would be a dangerous experiment, as I am of opinion it would rot them; although the justly celebrated Mr Young in his Tour in Ireland (vol. 1st page 348), mention the practice of a Mr French

with a direct contrary effect. His words are, " In the winter he feeds his reclaimed Boggs with Sheep, they have a perpetual spring of grass through that Season, and are of a nature so contrary to that of rotting Sheep, that they will recover those which are threatened with that distemper." There is no disputing facts, and as I have no experience to the contrary, am not intitled to suppose otherwise, but if I may be allowed to argue from analogy, it would appear to me to have a very different tendency. It is well known from experience, that even moor-lands, though pretty dry, and where rot never was known, in their original state; upon being broke up and improved with Lime and Dung and a crop of Turnips, with one or possibly two Crops of Corn taken and sown up with Clovers and Rye-grass; these moors managed in this manner, have a violent tendency to rot Sheep, especially after the artificial grasses have failed, and are succeeded by the natural grass, and more especially where the bottom is wet and clay; which obliges Farmers to take up these grounds much sooner, and more frequently than they would incline, or that there interest would lead them; and it is also a well known fact, that wet, green, swardy ground (in Scotland improperly called meadow), has also the same bad quality in a high degree; in so much that wherever this happens in a field, it is, or ought to be fenced off from the dry ground, wherever Sheep are intended to be kept, and they never ought to be allowed to go upon it.

This distemper is not so hazardous to Farmers who keep what is called a flying stock, by which is meant those who purchase a new stock every year, and feed them off the same year. A Sheep will get fat and remain so a considerable time after it is so far tainted, that the Liver will be considerably ulcerated; and in time would certainly die; and I have seen some killed pretty fat when there was scarcely a drop of blood in their body. But this foreign to the subject, and lengthening this account already too long. I shall

therefore conclude with a calculation of the expence of improving an acre of Moss, upon the preceding plan; and as I would not wish to mislead, I will take the produce at the lowest rate my information bears; and the articles of expence at the highest; in as far as the work has been done by contract; and in articles where I have not been able to obtain information; such as laying on the Lime and dung the first year, digging and carrying off the Potatoes, harvesting and carrying off the Corns, &c. which have been in use to be done by the Farmers and their Servants, and no accurate account kept; I shall state these at the ordinary price of Labour in other parts of the Country, so as any person can check them; as I by no means pretend it can be absolute accurate, so as to answer in every situation. The principal difference however will be the expence at which Lime can be afforded upon the spot; which appears to be essentially necessary in this improvement, and which every person can easily calculate before he attempts it. The other articles of expence, will I believe be found highly charged.

#### EXPENCE OF IMPROVING AN ACRE OF MOSS.

*Nota.* The acre in this Account, is always meant the Scotch Acre, being nearly one fifth larger than the English Acre.

The average size of the inclosures is eight Acres; to inclose which by the main-drains will require 143 falls, of eighteen and a half feet each, at One Shilling per fall in proportion for one Acre,  $17\frac{3}{4}$  falls.

Digging and forming the Ridges with the division-furrows, is from one pound thirteen shillings and fourpence, to Two pound Two shillings, say

Carried forward - - L. 2 : 19 : 9

Brought forward - - L 2 : 19 : 9

Prime cost Lime, for top-dressing one Acre, from four to eight Chalders; five Winchester Bushels make a Boll, and eight Bolls shell-lime a Chalder, producing sixteen Bolls powdered Lime, say eight Chalders, being 320 Bushels or 64 Bolls at 1s. 2d. per Boll.

L 3 : 14 : 8

The distance here is from one mile to one-and-a-half mile, 64 Bolls may at a greater distance be carried for

0 : 10 : 0

The expence of sixty-four Bolls of Lime will therefore be - - - - -

4 : 4 : 0

Laying on the Lime - - - - -

0 : 8 : 0

Value of the dung, supposing it bought, laid down at the side of the field, three shillings per single-horse Cart, 20 Carts

3 : 0 : 0

Laying on the dung - - - - -

0 : 8 : 0

Trenching Lazy-beds for covering the potatoes

0 : 6 : 0

Price of three Bolls of Potatoes for seed at eight shillings - - - - -

1 : 4 : 0

Taking up the potatoes and carrying home

1 : 16 : 0

Add Interest of L 14 : 0 : 5 for two years

14 : 0 : 5

Total expence

1 : 8 : 0

Produce of Potatoes from forty to fifty Bolls, say forty Bolls, at eight shillings per Boll

16 : 0 : 0

Gain upon the first Crop per Acre L 6 : 11 : 7

## SECOND YEAR.

Reducing the Lazy-beds into Ridges - - - 0 : 18 : 0

Brought forward	*	-	0:18:0
One Boll of Oats for seed	-	-	0:13:0
Four men harrow one Acre one Rood, say one Acre per day at 1s. 6d. each	1	-	0:6:0
Reaping	-	-	0:6:0
Carrying off	-	-	0:2:6
Leading and stacking	-	-	0:2:6
Threshing	-	-	0:5:0
Dressing	-	-	0:1:0
Carrying to market	-	-	0:5:0
			—
			2:19:0
Interest for one year	-	-	0:3:0
			—
			L 3:2:0
Produce ten Bolls per Acre, at thirteen shillings	-	-	L 6:10:0
Value of the straw	-	-	0:15:0
			7:5:0
Gain the second year	-	-	L 4:3:0

## THIRD YEAR.

Digging the Ridges	-	-	-	-	1:6:0
One Boll of Oats for seed	-	-	-	-	0:13:0
Harrowing	-	-	-	-	0:6:0
Reaping	-	-	-	-	0:6:0
Carrying off	-	-	-	-	0:2:6
Leading and stacking	-	-	-	-	0:2:6
Threshing	-	-	-	-	0:5:0
Dressing	-	-	-	-	0:1:0
Carrying to market	-	-	-	-	0:5:0
Clearing main-drains	-	-	-	-	0:1:0
					—
					3:8:0
Interest one year	-	-	-	-	0:3:4
Expences third year	-	-	-	-	L 3:11:4

[ 17 ]

Brought forward	-	L 3:11:4
Produce ten Bolls Oats, at thirteen shillings	- - -	L 6:10:0
Value of straw	- - -	0:15:0
		7:5:0
Gain third year	- -	L 3:13:8

#### FOURTH YEAR.

By this time the Moss is so consolidated as to be ploughed by horses, within two Bouts or Stitches of the division-furrows, and the Crop removed by Carts.

Ploughing	- - - - -	0:6:0
Digging two Spits or Stitches, and clearing division-furrows	- - - - -	0:4:0
One Boll of Oats for seed	- - - - -	0:13:0
Grass seeds	- - - - -	1:0:0
Harrowing with Horses	- - - - -	0:3:0
Reaping	- - - - -	0:5:0
Leading off and stacking	- - - - -	0:3:0
Threshing and dressing	- - - - -	0:3:6
Carrying to market	- - - - -	0:4:0
Clearing main-drains	- - - - -	0:1:0
		—
Interest one year	- - -	3:2:6
		—
		0:2:8
		—
Produce six Bolls Oats at 13s.	L 3:18:0	3:5:2
Value of straw	- - -	0:8:0
		4:6:0
Gain fourth year	-	L 1:0:10

#### FIFTH YEAR, HAY.

Cutting	- - - - -	0:3:0
Winning	- - - - -	0:3:0
Leading and stacking	- - - - -	0:5:0
	C	

Brought forward	-	L 0:11:0
Cleaning main-drains	- - -	0:1:0
		<hr/>
		L 0:12:6
Produce of 200 stone of Hay at 4d.	L 3:6:8	
After grass	c:10:0	3:16:8
		<hr/>
Gain the fifth year	- - -	L 3:4:8

The Moss will now be sufficiently consolidated, and fit for pasture, and will Let, as such, for One Pound Five Shillings per acre.

#### RECAPITULATION.

GAIN THE FIRST YEAR	- - -	0:11:7
SECOND YEAR	- - -	4:3:0
THIRD YEAR	- - -	3:13:8
FOURTH YEAR	- - -	1:0:10
FIFTH YEAR	- - -	3:4:8
		<hr/>
		L 12:13:9

And will Let for Pasture at One Pound Five Shillings per Acre.

The reclaiming of Moss upon this plan, bids fair to be of very great consequence, and when it becomes better known, will from experience suffer further improvement. There are many thousand acres of this sort of ground in Great Britain; situated in Climates where Corn thrives well; some in the very best Corn-Countries, where Lime, Marl, or other calcareous matter can be obtained at a moderate expence; which appears to be what is most essentially necessary in this improvement; and much greater quantities of Moss abound in Ireland, none of which produce a penny per acre in its natural state. There is no danger of not obtaining a proper level, for in most large Mosses that I am

acquainted with, a River runs through them and were it otherwise, and that they had no level, they would in time become Lakes.

There are no waste lands that I know, which can be improved with equal advantage as Mois; none will give so quick, or so large returns, or be so permanent. But I would advise any person possessed of Mois, and who may be desirous to make the experiment, to go himself, or send a man experienced in agriculture, to see the operations carried on at Swindrig-muir, and neighbourhood; and before he begins, endeavour to engage a Labourer from that part of the country, who has been experienced in the business, which they perform with great ease and dexterity, and there is no doubt but his own people will soon get into the method. If that cannot be obtained, a labourer may be sent to work there a short time, which will answer the purpose equally well.

I am confident that so large a quantity of Lime as I have before mentioned, is not so necessary in this improvement; especially if only three crops of Corn were taken before laying into grafts. I saw several fields where not more than five or six Chalders were given, and I could not distinguish any difference in the Crop when growing, from that which had eight Chalders. I am therefore of opinion that six Chalders, or 240 Bushels Shell-Lime, making sixty Bolts of the measure sold at Lord Elgin's works; or forty Bolts of the Linlithgow measure, would be abundantly sufficient for one acre, and would have the same good effect as a larger quantity, especially where Potatoes with dung are used for a first Crop; and indeed this is the average quantity employed here where Lime is so abundant.

I am,

October 1<sup>st</sup> }  
1796. }

DEAR SIR, &c.



